

REMARKS

Reconsideration of the pending application is respectfully requested in view of the foregoing amendments and the following remarks.

Status of the Application

Claims 1-5, 7-9, 11-13, 15, 16, 18, 19 and 21 are currently pending. No amendments are presented in this response.

Summary of the Office Action

Claims 1-5, 7-9, 11-13, 15, 16, 18, 19 and 21 are rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent 6,593,057 (Kita et al.) in view of U.S. Patent 6,821,704 (Ide et al.) or U.S. Patent 6,457,413 (Loccufer et al.).

Discussion

In one aspect, the present invention provides a positive working heat-sensitive lithographic printing plate precursor. This precursor comprises a support having a hydrophilic surface and a coating provided on the hydrophilic surface. The coating comprises: (a) an infrared light absorbing agent, (b) an oleophilic resin soluble in an aqueous alkaline developer, (c) a developer resistance means; and (d) spacer particles. The spacer particles comprise aluminum hydroxide or aluminum oxide and have an average particle size larger than 0.4 μm , with the average particle size being selected so that a portion of a plurality of the spacer particles extend beyond the surface of the coating, and wherein the amount of said particles in the coating is between 5 and 200 mg/m^2 .

In support of the obviousness rejection, the Office Action asserts that "regardless of whether there is an overcoat or whether the particles are larger in diameter than the thickness of the layer, the claims simply require that particles of that composition and size are present, thus the rejection is maintained."

Applicants respectfully disagree with the foregoing conclusion for the reasons set forth in its prior response (which provide additional detail and is incorporated by reference) and those which follow.

The claims include language which requires more than simply having particles present somewhere in the precursor. Indeed, the claims require *inter alia* “the average particle size being selected so that a portion of a plurality of the spacer particles extend beyond the surface of the coating, and wherein the amount of said particles in the coating is between 5 and 200 mg/m².”

The disclosure (and thus teaching) provided by Kita et al. is limited to the inclusion of 900 mg/m² of particles in the water-receptive layer. *See, e.g., Examples 1, 4 and 5.* The requirement of a relatively large amount of particles by Kita et al. is not surprising, as the Kita et al. particles are said in the Office Action to be present to increase the mechanical strength of the resin layer; the use of lesser amounts of particles (as in the claimed invention) being undesirable as a loss of mechanical strength would result.

The particles included in the claimed precursor provide certain desirable properties in the precursor, *e.g.,* increased scuff-mark resistance (*see, e.g.,* page 6 of the application as filed). Thus, the claimed invention uses particles in an entirely different way relative to Kita et al., and thus the claimed particles are present in relatively (and significantly) lesser amounts. While Kita et al. recognizes scratching of the imaging layers of the precursor as undesirable, it addresses this problem in a manner completely different than the claimed invention--Kita et al. teaches (only) the inclusion of a water-soluble overcoat layer which can be removed at the time of printing. *See col. 9, lines 6-9 and lines 43-45.* Kita et al. therefore cannot be said to teach or suggest the invention as claimed which requires *inter alia* spacer particles comprising aluminum hydroxide or aluminum oxide and have an average particle size larger than 0.4 μm , with the average particle size being selected so that a portion of a plurality of the spacer particles extend beyond the surface of the coating, and wherein the amount of said particles in the coating is between 5 and 200 mg/m².

The amount of particles required by Kita et al. far exceeds the amount required by the claims, and the other cited references fail to disclose or suggest the use of relatively lower amounts of particles as recited in the claims. It is thus respectfully submitted that the obviousness rejection should be withdrawn on this basis alone.

Moreover, Kita et al. and the other cited references fail to disclose or suggest that the particles extend beyond the surface of the coating, as further required by the claims. This

also is not surprising, because having the particles extend beyond the surface of the precursor has nothing at all to do with the concerns of Kita et al. as characterized by the Office Action--increasing the mechanical strength of the precursor. Indeed, and as mentioned above, Kita et al. addresses scratching issues in a manner completely distinct from the claimed invention--by using a removable protective overcoat layer. This distinction also provides a basis for withdrawal of the obviousness rejection.

Thus, even assuming *arguendo* the asserted combination is proper, one skilled in the art, if combining the references in the manner suggested in the Office Action, would not be provided with the invention as claimed. By way of example, one skilled in the art would be taught to prepare a precursor having relatively high levels of particle loading to provide the desired mechanical strength (900 mg/m²), and would further ensure that the particles did not protrude from the surface of the precursor. The latter is clear from Kita et al.'s inclusion of the use of surfactants for improving the surface state in the coating. *See, e.g., col. 8, lines 42-46.* Providing a precursor in which the average particle size is selected so that a portion of a plurality of the spacer particles extend beyond the surface of the coating is neither taught nor suggested by Kita et al. In fact, Kita et al. teaches just the opposite--it is desirable to have a perfectly smooth coating surface--and it uses a removable protective overcoat layer to prevent scratching of this smooth precursor coating.

Conclusion

As Applicants believe the application is in proper condition for allowance, the examiner is respectfully requested to pass the application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

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